

## **REMARKS/ARGUMENTS**

### **In the Claims:**

Claims 1-12 and 15-20 are original. Claims 13 and 14 are currently amended. All claims remain in this application.

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### **35 U.S.C. 112:**

Claims 13-20 are rejected under 35 U.S.C 112, second paragraph, as being indefinite for failing to point out and distinctly claim the subject matter which the applicant regards as the invention.

10 Antecedent bases are provided in the currently amended claims 13 and 14 in order to overcome the rejections.

### **35 U.S.C. 102(b):**

15 Claims 1-20 are rejected under 35 U.S.C 102(b) as being unpatentable over Leonard et al. US 3,803,819 (hereinafter Leonard). The applicant respectfully traverses the rejections made by the Examiner for at least the following reasons.

### **Claims 1-6**

1. Leonard adopts a different approach:

20 Leonard teaches a 2-level identification method to select an appropriate channel for communication (Leonard, column 2, lines 19-48). A channel is identified as either a pure free channel or a non-pure free channel by comparing the outcome of each channel independently with a predetermined value. Leonard fails to disclose the limitation as recited in claim 1, for “comparing the frequency band of the in-use channel with the frequency band of the first idle channel and the frequency band of the second idle  
25 channel” requires **comparing conditions regarding the in-use channel(s) and the idle channel rather than just comparing the outcome of each channel with a predetermined value separately by itself.**

2. Leonard rides on a different phenomenon:

The 2-level identification method is based on the phenomenon appearing in frequency modulation connections, in which a weak signal is absorbed by a strong signal, resulting in a complete tilting from the demodulation of one channel to another channel (Leonard, column 2, lines 3-18). After a scan of the frequency range when a relatively low level signal is injected, a channel is identified as a pure free channel if the received signal on the channel exceeds a predetermined value. And after a scan of the frequency range when a stronger level signal is injected, a channel is identified as a non-pure free channel if the received signal on the channel exceeds the predetermined value (Leonard, column 2, lines 19-48). Leonard fails to disclose the limitation of “determining a first reference value for the first idle channel and a second reference value for the second idle channel” as recited in claim 1. In the instant application, **the reference values are determined** “by **comparing** the frequency band of the **in-use channel** with the frequency band of the **first idle channel** and the frequency band of the **second idle channel**” (*emphasis added*) recited in claim 1, which is in other words, **according to neighborhood interferences of the in-use channels and the idle channels**, whereas **Leonard requires a predetermined value to compare the straightforward results** of each individual channel.

3. Leonard requires a precise value rather than a reference value:

In Leonard’s disclosure, a received signal on the channel bears a value that is resulted from the injected simulated signal (Leonard, column 2, lines 19-48). The value must be precise and specific in order to be compared with the predetermined value. Nonetheless, **the reference values of the instant application are determined “by comparing the frequency band of the in-use channel with the frequency band of the first idle channel and the frequency band of the second idle channel” as recited in claim 1, which can be manipulated according to specific restrictions as long as the generated reference values can be distinguished** among themselves.

For at least the forgoing reasons, claim 1 should be found allowable over the cited

reference, and the rejection based thereon should be withdrawn. As claims 2-6 are dependent upon claim 1, claims 2-6 should be allowed if claim 1 is found allowable.

Claims 7-12

5 The response regarding claim 7 shares a similar argument. Leonard lacks the disclosure as recited in claim 7, “comparing the frequency band of the in-use channel with the frequency band of the first idle channel and the second idle channel to determine a first reference value for the first idle channel and a second reference value for the second idle channel.” Claim 7 should therefore be found allowable over the cited reference. Claims 8-12, which are by virtue of depending on claim 7, should also be allowed if claim 10 7 is found allowable.

Claims 13-20

Regarding a similar issue, Leonard fails to disclose the limitation of “determining a reference value for each idle channel according to [[the]] a distribution of the at least one in-use channel among the channels” as recited in claim 13 of the instant application. **In** 15 **Leonard’s disclosure, each channel is identified alone**, independent from other channels. However, **in the instant application, an interference factor (a reference value) of each channel is detected according to the distribution of the at least one in-use channel**. That is, the reference value of each idle channel is determined depending on other channel(s), e.g., in-use channel(s) or idle channel(s). In addition, the 20 aforementioned arguments relating to claim 1 should also apply.

For at least the forgoing reasons, claim 13 should be found allowable over the cited reference. As claims 14-20 are dependent upon claim 13, claims 14-20 should be allowed if claim 13 is found allowable.

25 **Conclusion**

For the reasons as described above, the applicant believes that claims 1, 7 and 13 are allowable over the cited references. Insofar as claims 1, 7 and 13 are allowable, claims 2-6, claims 8-12 and claims 14-20 which are by virtue of depending on claims 1, 7 and 13

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respectively, should also be allowable on their own merits in claiming additional limitations not included in claims 1, 7 and 13. Withdrawal of the rejections and allowance of the claims, are respectfully requested.

Should the Examiner feel that further discussion of the application and the  
5 Amendment is conducive to prosecution and allowance thereof, please do not hesitate to contact the undersigned at the address and telephone listed below.

Sincerely yours,

10  Date: 10.17.2007

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